

# Engineering and Environmental Consultants, Inc.

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November 3, 2015

Mr. Arturo Burgos Mr. Tom Ryan City of Tucson, Environmental Services 4004 South Park Ave. Building 1 Tucson, Arizona 85726

Re: Annual Closed Landfill Inspection – Prudence Landfill

### INTRODUCTION

On October 13, 2015, Engineering and Environmental Consultants, Inc. (EEC) performed the annual field inspection at the closed Prudence Landfill. Prudence Landfill was operated by the City of Tucson as a Municipal Solid Waste facility from 1974 through 1978. The property is undeveloped but it is bounded by apartments and town homes along the central and south portion of its west boundary and by Gollob Park, a city of Tucson public park, along the northern portion of its west boundary.

Annual inspections are required at City of Tucson owned non-regulated closed landfills in accordance with the guidance document entitled "COT Closed Landfills Inspection and Maintenance Reporting and Procedures, March 2011". This guidance document was internally prepared by the City of Tucson Environmental Services Department (COT-ES).

Key elements of this inspection report are:

- A narrative summary of facility conditions including recommended corrective action(s) to be undertaken prior to the next scheduled inspection
- The Landfill Inspection Table used to document observed conditions (Attachment 1)
- An inspection photo log (Attachment 2)

### **INSPECTION SUMMARY**

The annual field inspection of Prudence Landfill is organized and conducted using the inspection report table included in the COT-ES inspection guidance document. A copy of the table filled out during this inspection is included with this report (Attachment 1). The table lists specific landfill items that must be inspected and provides space to comment on the conditions encountered during the inspection. The items inspected and the current conditions of these features at Prudence Landfill are summarized as follows:

# **Perimeter Security Fence and Gates**

There is perimeter fencing separating the landfill from the apartments and townhomes on the west. A gated fence on the north portion of the landfill prevents vehicular traffic from entering the landfill from the Gallob Park parking area. The existing fencing was observed to be in generally good condition but it does not fully enclose the landfill and prevent foot traffic from entering.

### **Inspection Roads**

The inspection roads in some areas of the landfill are rutted due to runoff.

### **Stormwater Controls**

The engineered drainage from the adjacent apartment complex towards the Pantano Wash is in very poor condition. A repair project initially planned by the City has not been completed.

### **Stormwater Retention Basins**

No Stormwater retention basins are located on the landfill.

### **Landfill Earthen Cap**

Minor rill erosion on the eastern edge of the landfill was repaired this year.

### **Landfill Gas Extraction System Wellfield**

The landfill gas extraction system at the landfill appears to be in good condition.

### **Gas Extraction System Compound**

The compound appears to be in good condition.

## **Landfill Gas Monitoring Wells**

The landfill gas monitoring wells appear to be in good condition.

# **Groundwater Monitoring Wells**

The groundwater monitoring wells located at the site appear to be in good condition.

### **Remediation Equipment**

The remediation compound and equipment are in good condition. Some minor weeding will be required in the future.

### **Illegal Dumping**

No illegal dumping was observed on the landfill.

## **Neighboring Land Uses**

There have been no changes in land use of neighboring properties since the last inspection.

# CORRECTIVE ACTIONS COMPLETED SINCE LAST ANNUAL INSPECTION

The following recommendations from the last annual inspection have been completed.

- The severe erosion at the northeast corner of the remediation compound was repaired and a permanent drainage pipe was installed to prevent future erosion at the location.
- Excessive vegetation along the perimeter of the remediation compound was removed.

### RECOMMENDED CORRECTIVE ACTIONS

The asphalt drainage north of the remediation compound is badly eroded. The erosion is head-cutting into the adjacent townhome property. This drainage should be repaired. While equipment is on site to make these repairs, the less critical rutting on the access roads can be easily repaired also.

No other corrective actions are recommended at this time.

Should you have any questions or require additional information, please contact me at 520-321-4625 (office) or 520-488-9205 (cell).

Sincerely,

**Chad Hancock** 

Field Services Manager, Environmental Services

Attachments:

1: Landfill Inspection Table

2: Site Photographs

EXPIRES 12/31/2016

(pnoisestong)

# ATTACHMENT 1 LANDFILL INSPECTION TABLE

# CITY OF TUCSON ENVIRONMENTAL SERVICES ANNUAL CLOSED LANDFILL INSPECTION REPORT PRUDENCE LANDFILL

Perimeter Security Fence and Gate (holes, structure issues)  Structure issues)  Inspection Roads (washouts, obstructions, Some erosion potholes)  Storm Water Controls (berms, let downs, spilling)  Storm Water Retention Basins (washouts, trash showing, debrie and trash)  Landfill Earthen Cap (washouts, trash showing, debrie and trash)  Landfill Gas Extraction System Wellfield (hole)  Compound (fenoling blower equipment, flare, carbon canisters)  Landfill Gas Extraction System Wellfield (blower equipment, flare, carbon canisters)  Landfill Gas Extraction System Wellfield (blower equipment, flare, carbon canisters)  Landfill Gas Extraction System Wellfield (blower equipment, flare, carbon canisters)  Landfill Gas Extraction System blower equipment, flare, carbon canisters)  Landfill Gas Extraction System blower equipment, flare, carbon canisters)  Landfill Gas Extraction System blower equipment, flare, carbon canisters)  Landfill Gas Extraction System blower equipment, blower equipment, flare, carbon canisters)  Landfill Gas Extraction System blower equipment, blower equipment, flare, carbon canisters)  Landfill Gas Extraction System blower equipment, blower equipment, flare, carbon canisters)  Landfill Gas Extraction System  None  Compound fencing Junu Junu Junu Junu Junu Junu Junu Ju			
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thy are impacting   None	Illegal Dumping (including overgrown vegetation, homeless camps, vectors)	None	
	and Uses (changing adjacent vill or currently are impacting	None	
	INSPECTOR SIGNATURE \		DATE
	(Mrd 52)		13/12

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# ATTACHMENT 2 SITE PHOTOGRAPHS



Photo 1: Damaged asphalt drainage



Photo 2: Western portion of damaged asphalt drainage



Photo 3: Rilling on earthen drainage, worst rilling obscured by weeds



Photo 4: Lower portion of main drainage